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# Two new Noctuidae from Spain, one of these – Mythimna (Foehstia) valeriae Beck, sp. n. - is new to Science. Eremodrina gilva (Donzel, 1837) is definitely recorded from Spain (Lepidoptera: Noctuidae)

CODEN: SRLPEF

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#### Abstract

Two species (Lepidoptera: Noctuidae) are recorded from Spain. One of them is new to Science: *Mythimna (Foehstia) valeriae* Beck, sp. n. The other species, *Eremodrina gilva* (Donzel, 1837), had been found in a light-trap in the Sierra Nevada, Granada, Ruta de Veleta, 1600 m, about 2000 km away from its known westernmost point of distribution in the French Alps. Thus now a doubtful finding of this species at Granada can be confirmed. KEY WORDS: Lepidoptera, Noctuidae, new species, new record, Spain.

Dos nuevos Noctuidae de España, uno de estos - Mythimna (Foehstia) valeriae Beck, sp. n. - es nuevo para la Ciencia. Eremodrina gilva (Donzel, 1837) es definitivamente citada de España. (Lepidoptera: Noctuidae)

#### Resumen

Dos especies (Lepidoptera: Noctuidae) se citan de España. Una de ellas es nueva para la Ciencia: *Mythimna* (*Foehstia*) valeriae Beck, sp. n. La otra especie, *Eremodrina gilva* (Donzel, 1837), ha sido encontrada en una trampa luminosa en Sierra Nevada, Granada, Ruta de Veleta, 1.600 m., cerca de 2.000 km., fuera de su lugar de distribución más occidental conocido en los Alpes franceses. Por lo tanto ahora, se puede confirmar una cita dudosa de esta especie en Granada.

PALABRAS CLAVE: Lepidoptera, Noctuidae, nueva especie, nueva cita, España.

## Mythimna (Foehstia) valeriae Beck, sp. n.

Holotype: 1 female, leg. Beck, 13-15-XI-2001, Spain, Almeria, Cabo de Gata (coast, 3-5 m), light-trap. Deposited in the Museo Nacional de Ciencias Naturales, Madrid, Spain.

Differential diagnosis: The comparison is made with *M. l-album*, a male, leg. Beck, E IX-2003, coll. Beck: Spain - Arag. - Albarracin/Valdevecar and with the lectotype of *Aletia (Mythimna) l-album* in the coll. of the Linnean Society, London, designated K. MIKKOLA & M. HONEY (1993). In the colour-picture-series of *M. l-album* in HACKER, RONKAY & HREBLAY (2002), there is a very bright specimen from Greece (plate 13, fig. 15), but this specimen has also the characteristic features of "normal" *M. l-album* specimen (the two pale diagonal fascia in the terminal field in characteristic extension, the sharp-edged l-album – on the right forewing, etc.).

The forewing (upper side): in M. l-album the white "1" is sharp-edged, in M. valeriae especially

towards the back-rim of the forewing and towards its base it is blurred-edged and so elongated to the base of the forewing and thus dividing the dark field on both sides of the "l"; in l-album this dark field is basal of the "1" continuously and includes also the blackish, basal streak which is in valeriae free. Very prominent is the different dark terminal field with two parallel diagonal pale beige fascia of which the longer one is directed to and into the apex, the shorter one ranges in the midst between the outer edge of the forewing and the long fascia to the apex: in l-album the 'short' stripe is extended up to the vein m3 (or to the midst of cell m2) – in valeriae this stripe is broad and very short, extended only up to vein cu1, resp. only to the midst of the cell cu1 and there as an isolated fleck, thus the dark brown terminal field is in valeriae continuous from the vein cul up to the apex. The dark (black) points (at the costa and on the vein cu1) of the antemedian and postmedian cross-lines in l-album are missing in valeriae. The relatively slender forewing of l-album is expressed by the narrow and rectangular cells (at least in the outer 3/3-3/4 of the cells) and the therefore parallel veins (in the terminal field); thus the length of cell m1 (between the veins m1 and m2) is in l-album 5 ½ times the width of this cell, in valeriae it is 3 ½ times the width of the cell; additionally the veins of valeriae are more arched in the terminal field, still more, vein r5 is angled and therefore the cell r4 triangular, in *l-album* rectangular. In valeriae, with exception of the two bold black basal streaks (the second one between vein an and the back-rim of the forewing) all black markings are blurred-edged especially the dark flecks in the cells at the outer margin of the forewing which are longish and without magnification hardly visible but which are in lalbum sharp-edged and semicircular to triangular, also on the hindwing.

Underside (of both wings): there are no significant differences.

Character of the very worn lectotype: on the left forewing in the terminal field the rectangular cells are well recognizable, also the two pale beige diagonal fascia in the terminal field, of which the shorter, outer one is elongated to the midst of cell m2; the black triangular flecks in the cells at the outer edge of the termen are also well visible. On the right forewing there is the sharp-edged white 'l' in good condition; of the dark flecks in position of the postmedian cross line there is recognizable the fleck on vein cu2.

Genitalic structure (female): gen. prep. 2./22-II-2004, S. Beshkov, female, Spain, Almeria, Cabo de Gata, 13-15-XI-2001, leg. Beck. Comparison with the figure of *l-album*, female, in HACKER, RONKAY & HREBLAY (2002: fig. 318). The similar appendix bursae of *valeriae* (as compared with *l-album*) stands rectangular to the bursa and is therefore distant from the ductus bursae, in *l-album* the appendix bursae stands at 45° to the axis of the bursa and therefore touches the ductus bursae. The bursa of *l-album* is ovoid-rounded, in *valeriae* it is quadratic. In *l-album* all apophyses are sticklike, in *valeriae* the posterior apophysis is similarly slender, the anterior apophysis is stout, short and apically enlarged, ostium bursae transversally straight with small central semicircular inlet in the anthrum (this position is in the fig. of HREBLAY not recognizable).

Discovery: During an excursion to Spain (Almeria) I put light-traps at the coast at Cabo de Gata from 13-15-XI-2001. During examination in the morning I took a *M. l-album*-female for eggs, because I wanted more larval material from this unique *Mythimna*-species, especially for further larval characterizing as compared with larvae of the other *Mythimna* (and *Leucania*) spp.. After some days the female had died without having laid eggs. I then suddenly became aware that the pattern of the forewing was very different from that of *M. l-album*. Mr Honey of the BMNH stated by photos sent to him (by the courtesy of my friend Kobes) that the specimen was quite different from all other *Mythimna*-spp. of the museum-material and that there was especially no comparable material from North-Africa, resp. from Africa. The other (Asiatic) species of the species-group are very different in appearance. So the only comparison is with *Mythimna* (*Foehstia*) *l-album* Linnaeus, of which Mr Honey kindly sent me the photos of the lectotype (designated by HONEY & MIKKOLA, 1993), a male.

Despite there being only one female of the new species and in spite of the advice of my friend Beshkov (who made the genitalic preparation) not to describe a new species on this limited basis, I think it is necessary to draw attention to this new taxon, which is enough different from *l-album* by the shape and pattern of the forewing, to justify the state of a separate species.

Etymology: in honour of my wife Valeria Beck.

Taxonomic note: The specific position of *Mythimna l-album* (Linnaeus, 1767) within the Mythimnini is not only stated by BECK (1999), with the subgenus *Mythimna* (*Foehstia*) but also by the "*l-album* species-group" of *Mythimna* (*Hyphilare*) by HREBLAY (1999).

The M. l-album species-group comprises:

M. l-album (Linnaeus, 1767) syn. penicillata (Moore, 1881)
M. valeriae Beck, sp. n.
M. bistrigata (Moore, 1881) syn. albipatagis (Chang, 1991)
M. proxima (Leech, 1900)
M. rufistrigosa (Moore, 1881)
M. kerala Hreblay & LEGRAIN, 1999

Concerning the erection of the subgenus *Foehstia*, see BECK (1999: 629). The at present ruling taxing by Hreblay, which only considers the very uniform genitalia of the males and takes not in consideration neither the so different seize of the adults, the pattern and shape of their forewings nor the larval differences (BECK, 1999, 2000) is to correct.

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Eremodrina gilva (Donzel, 1837): the doubtful record of this species for Spain (at Granada) is now confirmed.

Discovery: during a collecting trip in June 2007, this species, a male, was collected far away from its utmost western distribution in the Alpes of France (according to the distribution-map of HACKER (2004: 276): 20-21-VI-2007, Spain, Sierra Nevada, Granada, Ruta de Veleta, 1600 m, light-trap, leg. Beck

Hitherto this species is not recorded from Spain (VIVES MORENO, 1994, 1995, 1996; YELA & SARTO MONTEYS, 1990; YELA 1997), only CALLE (1982: 515?, p. 136) remarks a doubtful presence for Spain from Granada without noticing the source.

Location: The recorded specimen is given to the Museo Nacional de Ciencias Naturales, Madrid, Spain.

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I am very indebted to Dr. Beshkov who made the genitalic preparation, to Prof. emerit. Dr. Kobes who advised me and contacted me with Mr Honey; to Mr Honey who made the comparison of the new species with the material of the BMNH and who contacted the Linnean Society at London to provide me with the pictures of the *Mythimna l-album*-lectotype. Thanks also to Dr. Rodeland for the photos.

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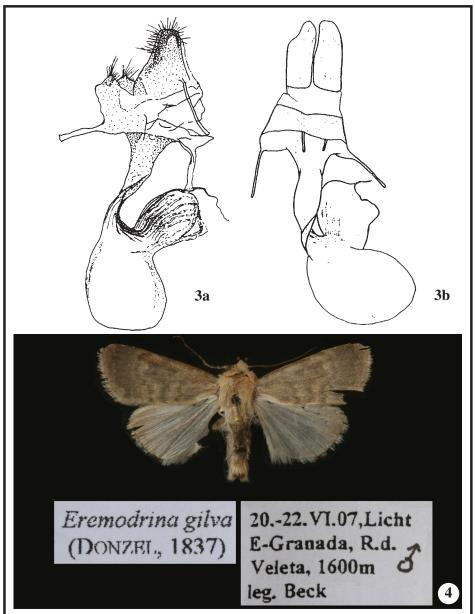
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**Figs. 1-2.— 1.** *Mythimna (Foehstia) valeriae* Beck, sp. n., female, holotype, in comparison with *Mythimna (Foehstia) l-album* (Linnaeus, 1767), male (phot. Rodeland). **2.** Lectotype of Phalaena Noctua l-album Linnaeus, 1767 in the coll. of the Linnaen Society, London, designated by MIKKOLA & HONEY (1993), with labels, right and left side (wings) of the imago (phot. Honey, montage of the photos by Rodeland).



**Figs. 3-4.– 3.** Genitalic structure (females) of *Mythimna (Foehstia)*. **3a.** *Mythimna (Foehstia) valeriae* Beck, sp. n., prep. Beshkov. **3b.** *Mythimna (Foehstia) l-album* (Linnaeus), prep. Hreblay (HACKER, RONKAY & HREBLAY, 2002: fig. 318). **4.** *Eremodrina gilva* (Donzel, 1837), male, 20-21-VI-2007, Spain, Sierra Nevada, Granada, Ruta de Veleta, 1600 m, light-trap, leg. Beck (phot. Rodeland).